REMARKS

Applicant respectfully requests consideration of the subject application as amended herein. This Amendment is submitted in response to the Office Action mailed on August 31, 2006. Claims 1-3, 5, 6, 8-10, 12-15 and17-19 are rejected. Claims 1, 2, 6, 9, 13 and 14 have been amended. New claims 3 and 15 have been canceled without prejudice. No new matter has been added.

35 U.S.C. §112

The Examiner has rejected claim 19 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 has been amended to particularly point out and distinctly claim the subject matter, which Applicant regards as the invention.

35 U.S.C. §102

The Examiner rejected claims 1, 2, 9, 13, 14 and 18-19 under 35 U.S.C. §102(a) as being anticipated by Applicant's Admitted Prior Art, (hereinafter "AAPA").

AAPA discloses a prior art interleaving algorithm in which the interleaving is performed using 13 instructions, with the executed number of instructions being equal to 163. The presently claimed invention uses a single bit-level interleaving instruction on two data streams to generate a combined data stream. This feature of the present invention is included in the following language of claim 1:

> ... identifying a first stream of data stored in first source register and a
> second stream of data stored in a second source register; and
> performing a single bit-level interleaving instruction on the first stream of
> data and the second stream of data to generate a combined stream of data in a
> destination register.

Similar limitation is also contained in independent claims 6, 9 and 13. Accordingly, the presently invention as claimed in claims 1, 6, 9 and 13, and their corresponding dependent claims, is not anticipated by AAPA. Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. §102(a).

35 U.S.C. §103

The Examiner rejected claims 5, 12 and 17 under 35 U.S.C. § 103(a) as being unpatentable over AAPA, and further in view of Romano, et al., (U.S. Patent No. 5,586,306). Romano does not help AAPA render the presently claimed invention unpatentable as it lacks the present features that are missing from AAPA. In particular, neither AAPA nor Romano teaches or suggests performing a single bit-level interleaving instruction on two data streams to generate a combined data stream. Accordingly, the presently invention as claimed in claims 1, 6, 9 and 13, and their corresponding dependent claims, is patentable over the cited references. Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. §103(a).

Therefore, applicant respectfully submits that all pending claims are in condition for allowance, which action is earnestly solicited.

DOUBLE PATENTING REJECTION

Claims 1-3, 5, 6, 8-10, 12-15 and 17-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of co-pending Patent No. 6,760,822. The terminal disclaimers in compliance with 37 CFR § 1.321 are filed herewith to overcome the provisional nonstatutory double patenting rejection.

Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicant hereby requests such extension.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Marina Portnova at (408) 720-8300.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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Marina Portnova
Attorney for Applicant
Registration No. 45,750

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8300